

IN THE CLAIMS

Please cancel Claim 1 without prejudice or disclaimer of its subject matter, amend Claim 2, and add Claims 5 through 20, as follows:

1 2. (Amended) [The] A tray driving apparatus of a microwave oven [as claimed in claim 1],
2 [wherein the] comprising:
3 a driving source for rotating a tray disposed in a cooking chamber of said microwave oven;
4 a driving shaft rotated by the driving source;
5 a driven shaft connected to the tray and rotated together with the tray; and
6 speed changing means for changing the rotational speed of the tray by changing the ratio of
7 the rotational speed transmitted from the driving shaft to the driven shaft;
8 said speed changing means [includes] including:
9 a driving gear unit having a plurality of driving gears, and mounted to the driving
10 shaft; and
11 a driven gear unit having a plurality of driven gears corresponding to respective
12 driving gears of the driving gear unit, and mounted to the driven shaft;
13 wherein gears of any one of the driving gear unit and the driven gear unit are portion
14 gears which are gears having gear teeth on respective portions of outer peripheries thereof,
15 so that, upon a rotation of the driving shaft, each portion gear of any one of the driving gear
16 unit and the driven gear unit are alternately meshed with a corresponding gear of the other

one of the driving gear unit and the driven gear unit, to thereby change the rotational speed of the tray.

⁴
~~--5.~~ A tray driving apparatus of a microwave oven, comprising:

a tray;

a tray shaft fixed to said tray and rotatably mounted on a cooking chamber;

a plurality of tray gears fixed to said tray shaft;

a driving source mounted on said cooking chamber;

a driving shaft connected to said driving source; and

first and second driving gears fixed to said driving shaft, and having a tooth portion and a toothless portion, disposed to be meshed with respective tray gears, each tooth portion of said first and second driving gears alternatively meshed with said respective tray gears while said driving shaft rotates by said driving source.

⁵
~~--6.~~ The tray driving apparatus of claim ⁴~~5~~, with said tray gears being different from each other in diameter.

⁶
~~--7.~~ The tray driving apparatus of claim ⁴~~5~~, with said first and second driving gears being different from each other in diameter.

7
--8. The tray driving apparatus of claim ⁴5, with the tooth portion of said first driving gear
being coupled to one of said tray gears while the tooth portion of said second gear disconnected from
the other one of said tray gears.

8
--9. The tray driving apparatus of claim ⁴5, with the tooth portion of said first driving gear
disposed to be coupled to one of said tray gears before the tooth portion of said second gear is
disconnected from the other one of said tray gears.

9
--10. The tray driving apparatus of claim ⁴5, with first and second driving gears having said
tooth portion formed on one portion of an outer peripheral surface of said first and second driving
gear while said toothless portion is formed on the other remaining portion of said outer peripheral
surface of said first and second driving gear.

10
--11. The tray driving apparatus of claim ⁴5, wherein the tooth portion of said first driving
gear and the toothless portion of said second driving gear are formed on one area around said driving
shaft while the toothless portion of said first driving gear and the tooth portion of said second driving
gear are formed on the other area around said driving shaft.

11
--12. The tray driving apparatus of claim ⁴5, with said tray rotating with a first rotational
speed when the tooth portion of said first driving gear is coupled to the corresponding tray gear and
with a second rotational speed when the tooth portion of said second driving gear is coupled to the

4 corresponding tray gear while said driving shaft rotates by said driving source.

1 ¹²
--13. A tray driving apparatus of a microwave oven, comprising:
2 a tray disposed in a cooking chamber;
3 a tray shaft coupled to said tray and rotatably mounted on a cooking chamber;
4 a tray gear unit fixed to said tray shaft, having a first gear tooth portion and a second gear
5 tooth portion;
6 a driving source mounted on said cooking chamber;
7 a driving shaft coupled to said driving source;
8 a driving gear unit fixed to said driving shaft, having a third gear tooth portion disposed to
9 be meshed with said first gear tooth portion and a fourth gear tooth portion disposed to be meshed
10 with said second gear tooth portion; and
11 said third gear tooth portion and said fourth gear tooth portion alternatively meshed with the
12 corresponding first gear tooth portion and second gear tooth portion while said driving shaft rotates
13 by said driving source.

1 ¹³ ¹²
--14. The tray driving apparatus of claim 13, with said tray gear unit comprising a first gear
2 having said first gear tooth portion and a second gear having said second gear tooth portion, said first
3 and second gears fixed to said tray shaft and rotating about an axis passing through a center of said
4 tray shaft.

1 ¹⁴
--~~15~~. The tray driving apparatus of claim ~~14~~¹³, with said first and second gears being
2 different from each other in diameter.

1 ¹⁵
--~~16~~. The tray driving apparatus of claim ~~13~~¹², with said driving gear comprising a third gear
2 having said third gear tooth portion and a fourth gear having said fourth gear tooth portion, said third
3 and fourth gears fixed to said driving shaft and rotating about an axis passing through a center of said
4 driving shaft.

1 ¹⁶
--~~17~~. The tray driving apparatus of claim ~~16~~¹⁵, with said third and fourth gears being
2 different from each other in diameter.

1 ¹⁷
--~~18~~. The tray driving apparatus of claim ~~16~~¹⁵, with said third gear tooth portion formed on
2 a portion of an outer peripheral surface of said third gear in one area around said driving shaft while
3 said fourth gear tooth portion is formed on a portion of an outer peripheral surface of said fourth gear
4 in the other area around said driving shaft.

1 ¹⁸
--~~19~~. The tray driving apparatus of claim ~~18~~¹⁷, with said third gear tooth portion of said third
2 gear meshed with said first gear tooth portion while said fourth gear tooth portion of said fourth gear
3 is disconnected to said second gear tooth portion.

1 ¹⁹
--~~20~~. The tray driving apparatus of claim ~~13~~¹², with said tray rotating with a first rotational

2 speed when third gear tooth portion is meshed with said first gear tooth portion and a second
3 rotational speed when said fourth gear tooth portion is meshed with said second gear portion while
4 said driving shaft rotates by said driving source.

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